

BREAKER

TASMANIA'S ANTARCTIC BUSINESS MAGAZINE

Expose Your Extremes

Midwinter Photo Competition and Writers' Festival

Icy Instrumentalists

Imbros' role in Antarctica

A Runway Success

Latest report from Casey

An Ice Tourist's Voyage

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Editorial

Welcome to another busy Antarctic year. By the time you receive this edition, the new Antarctic exhibition at TMAG will have been opened. I was able to visit the display space before everything was in place, as part of an introduction to teachers interested in bringing students to TMAG. With the help of a layout plan, I could visualise the different areas described by Education Officer, Andy Baird, and hope other visitors will be as impressed as I was.

Organising is well underway for the Midwinter Festival, so check out info on the new Writers Festival and Photographic Competition being held this year. The TPN Trade Show design for the July COMNAP meetings is also taking shape and should draw a lot of attention to what the Polar network members have to offer to overseas delegates.

Several regular contributors to IB are missing this issue because of the forthcoming State Elections, but thanks to the other contributors and the interesting articles they provided. Please note, the next edition of Ice Breaker will be available later than usual, after Midwinter, so that copies will be available for the visiting COMNAP delegates in July.

Anthea Wallhead

Cover Picture: View from a zodiac of an iceberg near Coulman Island, Antarctica by Sue Halliwell.

Back Page: Antarctic Stations - Stamp Covers from Klaus Arne Pedersen

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ICE BREAKER Exclusive!

An Ice Tourist's Viewpoint by Sue Halliwell

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ICE BREAKER
TASMANIA'S ANTARCTIC BUSINESS MAGAZINE

PEG PUTT'S MESSAGE



Tasmania's Sub-Antarctic islands are an often overlooked yet no less magnificent part of the state. We Greens have expressed our strong concerns when plans by the Australian Antarctic Division to withdraw from Macquarie Island came to light.

I am keen to ensure that the unique management challenges these fragile environments provide do not go overlooked. In July this year I hope to attend the International Forum on the Sub-Antarctic organised by Antarctic Tasmania. The forum is organised around discussions on oceanography, geophysics, climate, biodiversity, ecology, human use, and conservation and management of the Sub-Antarctic. Delegates from around the globe are expected to attend, no doubt taking in the sites and sounds of Hobart and beyond. The Greens welcome them and hope to participate in an insightful exchange.

Immediately following this forum, from Wednesday 12th to Friday 14th July, the Second Scientific Committee on Antarctic Research (SCAR) is holding the Open Science Conference (OSC). The theme of this meeting is "Antarctica in the Earth System". It is exciting to see Tasmania hosting these opportunities for the development of new ideas and areas of study in Antarctic science.

I should not end my contribution without mentioning the ongoing struggle to protect endangered whales in the Southern Ocean from needless slaughter. We all witnessed the direct struggle between Greenpeace and a Japanese whaling boat as it was beamed to televisions across Australia and the world. Enforcement of our laws and treaties clearly fall outside of the responsibilities of the average citizen; the Australian Government should be doing more to uphold the purpose of endangered species agreements and the Southern Ocean Sanctuary. Tokyo does not recognise the sanctuary where, under the guise of "science", Japanese whaling boats kill a portion of their reported quota of 935 minke whales, 50 fin whales and up to 50 endangered humpback whales.

Peg Putt MHA

Tasmanian Greens Opposition Leader

MIDWINTER SPECIALS

David Laskey has been appointed Director for the third year running, to co-ordinate the Midwinter Festival events.

The Midwinter Festival has won the award for "Most Significant Event" at the Tasmanian Tourism Awards in both 2004 and 2005.

Two significant new events are included in this year's Midwinter Festival (June 16-25 inclusive)

1. **"Ice Cold Words"** - an Antarctic Writers' Festival - is a new literary event occurring on the last weekend (June 23-25). The festival received \$12,000 in funding from the Commonwealth Government through Festival Australia for this and the event will be delivered by the Tasmanian Writers Centre (<http://www.tasmanianwriters.org/>). The program will include readings, discussions, debates and interpretations of Antarctica, as well as Australian and international authors who have either travelled to Antarctica or have published fiction, non-fiction, plays, poetry, and prose set in Antarctica.

2. **"Extreme Environment Photographic Competition"** is one of the most exciting new activities. It includes the Wayne Papps Memorial Prize for the Best Antarctic Image. The competition is open internationally to both amateurs and professionals, with prizes totaling \$2,000. To enter, visit the Midwinter festival website at www.antarctic-tasmania.info or email boothb@hobartcity.com

TPN CHAIRMAN'S MESSAGE



July's COMNAP/SCAR/SCALOP conference is now only 4 months away and is shaping up well to be both a real boon to Tasmania and a memorable time for us all. I urge all TPN Members to participate as much as possible to promote both our State and their own interests. We will have the worlds "who's who" in Antarctic and Southern Ocean science on our patch and we need to do all we can to convince them of our interest in them and their affairs being conducted out of Hobart. Antarctic Tasmania staff will be seeking volunteers and inviting participation for many events and occasions – please try to be there and assist if you are able.

We are approaching the part of the year when we need to reconsider our strategic direction and future actions in the context of the TPN Strategic Plan. If we look backwards, we have had a significant focus on first helping to get the Airlink funded and then in getting it based in Hobart. Both those objectives are now a reality so we can think ahead again. In doing so we should recognise that we can in fact help these sorts of things happens and keep our sights high. Some things we could seek to assist with are:

- Securing the future of the CRC beyond its currently funded horizon of 2009
- Defining the future role of Macquarie Island and then helping it happen
- Getting more focused on the many issues surrounding Antarctic Tourism and then working to responsibly implement our planned actions.

There are no doubt many other issues which I encourage TPN Members to bring forward for inclusion in our strategic planning considerations. These are real and meaty issues which we should seek to engage for the benefit of our State as well as other stakeholders.

The 2006 Midwinter Festival is now only 3 months away – we are all noticing the shortening days - and planning is well in hand for an even bigger and better event than previous years. One of the underlying reasons for establishing the Festival was to get Tasmanians outdoors in mid-winter in order to help our many hospitality-based businesses through their low season. During the current election season, I have noticed at least one of the major Parties announcing their intention to bring more world calls events to Tasmania during the low season, so perhaps we are having an influence there too?!

I look forward to further announcements soon regarding the Airlink including the performance of the two CASA's down south this summer and details of the inter-continental link planned for next summer.

Bill Lawson.
TPN Chairman.





As I write this update, many of our ACE CRC researchers are on the *RV Aurora Australis* off the coast of East Antarctica in the midst of one of our major research voyages. The BROKE¹-West voyage is an exciting piece of fieldwork in which we will be relating a range of biological observations, covering plants and animals from microscopic plankton to krill and right up to seabirds and whales, to data on physical oceanography over more than 50 degrees of longitude from around the Antarctic margin and up in to the southern ocean. BROKE-West is a long research voyage, 71 days, and we expect it to provide major insights to the factors that regulate krill populations and the animals that depend on them off East Antarctica as well as providing important oceanographic information from a part of the world that is key to the world's ocean circulation climate. This voyage complements an earlier voyage (BROKE) that did similar sampling 1996 and together these two voyages will give us the most comprehensive view of the East-Antarctic environment yet available.

The voyage leader, Dr Steve Nicol, is posting regular and entertaining updates on progress of the voyage on the Australian Antarctic Division's website (<http://www.aad.gov.au/default.asp?casid=21258>) for those who would like to get some insights to what goes on on a major research cruise. We also posts periodic reports from the voyage on the ACE CRC website (http://www.acecrc.org.au/drawpage.cgi?pid=ace_internal&aid=797399), written from the perspective of an educator's (Pam Elliot of the Marine Discovery Centre, Woodbridge, Tasmania) first trip to Antarctica.

Earlier this year some of you might have heard Dr John Church on the radio speaking about some interesting results from the ACE CRC Sea-Level Rise Program that were published in the journal *Nature*. Essentially, John and his colleagues have discovered that volcanic eruptions have significant effects on sea-level and we need to take those effects into account when estimating how sea-level seems to be changing over decades. Part of the reason sea-level has been rising recently is because of warming of the ocean as a result of greater retention of heat in the earth's atmosphere and ocean by the 'greenhouse effect'. When the ocean warms even slightly, it expands and so we see sea-level rise a little. Volcanic eruptions impact on these processes because they eject vast amounts of fine particles into the atmosphere and those particles react with water in the atmosphere to form aerosols, which reflect more of the incoming radiation from the sun than would otherwise be reflected. This increased reflection means that less radiation gets to the ocean and so a slight cooling of the ocean occurs, with an accompanying reduction in volume and so slight drop in sea-level. The material ejected into the atmosphere by the volcano can take several years to fall to earth but once the cooling-effect is initiated in the ocean it is can take decades or longer to wear off.

Another recent discovery by our sea-level researchers is that the rate at which sea level has been rising over the last 150 years is increasing. This is another world first from the ACE CRC and its partners and an important step in understanding a key impact of climate change. Now that we know these effects occur, however, we can better estimate what has been happening with sea-level in the recent past and what to expect in the near future – both jobs being tackled by the ACE CRC.

I am pleased to report that our Policy Program has hosted another successful forum in Canberra that brought together researchers from our science programs and staff from several Commonwealth departments to discuss the latest results of our research and how to make best use of them in the formulation of national policies on a wide range of climate and ocean related issues. This forum was focused on linking the work we do in and around Antarctica and the Southern Ocean with our understanding of modern climate change and its impacts around the Australian coast and in the tropical pacific. Many people don't realize that our knowledge of climate change and its impacts is built on research done in the far south. Part of our purpose in the ACE CRC research and policy fora is to clarify those links and learn from folk in government how that understanding can be made most useful for important decisions about how we might respond to a changing world.

Finally, it gives me great pleasure to advise that the University of Tasmania has appointed our Patron, Sir Guy Green, an Honorary Professor in the Antarctic Climate & Ecosystems CRC. Professor Sir Guy Green has received the award in recognition of his outstanding contributions and leadership as a champion of Antarctic research and education over many years, both during his period as Governor of Tasmania and since his retirement. Congratulations Professor Sir Guy Green.

¹ BROKE = **B**aseline **R**esearch on **O**ceanography, **K**rill and the **E**nvironment

IMBROS P/L – PROBING THE DEPTHS

Imbros Pty Ltd is a wholly Tasmanian-owned company, selling scientific instrumentation and supplies to research, government, and industry throughout Australasia. [Thanks to Martin Hills for this company profile.]

The company was formed in 1974, as a Tasmanian supply-house of general laboratory equipment and associated items. This business grew rapidly, and the company was appointed as sole distributor in Tasmania and Australia for a number of well-respected national suppliers in the laboratory equipment field.

During the 1980's, both the Australian Antarctic Division and CSIRO Marine Research laboratories relocated to Hobart. These moves prompted Imbros to expand into the fields of oceanography, meteorology, and environmental monitoring. Imbros now maintains Australasian distributor rights for a number of major international industry leaders in these fields. These associations have resulted in Imbros becoming involved in large projects for Defence, environmental baseline studies for major infrastructure developments, scientific monitoring systems for Environmental Protection Authorities (EPAs), research institutions and other government agencies, as well as for the oil and gas industry.



Imbros provides equipment for measurement of ocean currents and waves, salinity, temperature, underwater optics, nutrients, turbidity, chlorophyll and underwater acoustics, as well as water sampling devices, mooring systems, precision winch systems, and other associated subsurface mechanical requirements. Underwater imaging systems, including digital still and video cameras, remotely operated vehicles (ROVs) and lighting equipment are also an expanding part of Imbros's business line.

measurement of temperature and salinity changes through the ocean layers from the surface to the ocean floor. Other sensors are often integrated into these systems to provide the scientists with additional measurements – such as levels of dissolved oxygen, chlorophyll, light, suspended particles, water clarity, etc.

The Antarctic Division uses large high-precision conductivity, temperature and depth (CTD) measuring systems provided by Imbros. These systems are lowered from the research vessel, and provide



Similar large CTD systems are also used by CSIRO Marine Research and the Australian Institute of Marine Science, Townsville. Smaller systems are used by many universities, government departments, water authorities, and industries throughout Australia. A sophisticated CTD system was recently sold to a gold mining company in PNG, and Imbros personnel travelled to the site to assist with the initial deployment.

Imbros also supplies a wide range of laboratory equipment and supplies to the Antarctic Science community – including Antarctic Division, CSIRO, and University of Tasmania. We are often called upon to assist with urgent scientific requirements of research ships from other countries in Hobart Port.



In addition to being able to provide a wide range of laboratory and marine scientific instrumentation and supplies, Imbros provides customised systems to meet the often demanding requirements of scientific research. We have built special undersea frames for recording instruments and water sampling systems, attachments for remotely operated underwater vehicles, cabling systems for diver-actuated recording instruments, and have repaired, modified and re-built many undersea instrument systems to the client's requirements.



The company currently employs 11 staff at its location in Hobart. All engineering and sales staff have specialist training in their field.


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GLACIAL BLUE – CASEY'S NEW RUNWAY

Construction of the first glacial blue-ice runway in Australia's Antarctica Territory has been under way this summer in preparation for the introduction of an intercontinental air service in 2007-08. Around \$3 million of specialist equipment - with almost \$2 million of that sourced through Tasmanian business – recently left Hobart and arrived at Casey aboard the icebreaker *MV Vasily Golovnin*.

Over this summer a team of five runway construction crew based at Casey, with considerable input from many others on station, has constructed a trial snow pavement, separate from the proposed main runway at Wilkins, some 75 km from Casey.

Although its size, a mere 200 m by 30 m, is but a fraction of the finished runway (4000 m by 100 m), it has exceeded all expectations in terms of success. One of two key objectives for the season was to validate the construction process for the main runway for intercontinental air transport from Australia to Antarctica.

Blue ice runways have been used many times in Antarctica, but during the summer, these surfaces can quickly become unusable. Even in temperatures which never rise above 0 degrees Celsius, the deep blue ice absorbs heat from the sun and warms up, causing melts and pitted surfaces which rapidly become unsafe for landing aircraft. This is particularly the case in the lower latitudes of the AAT coastline.

A protective white snow pavement bonded to a blue ice glacier will deflect the sun's rays, remain colder and so is less prone to breaking up and melting than blue ice. It is also infinitely repairable. Wilkins runway is being constructed high on the plateau 75 kms inland from Casey so that the temperatures will remain cool enough for the technique to work throughout the summer.

Although the runway is sited to face into the katabatic winds, crosswinds do occur which can make it dangerous to land an aircraft. The snow pavement has the additional benefit of creating a higher friction co-efficient which will allow aircraft to operate more safely in these conditions.

The science of snow paving depends on understanding variables such as temperature, moisture content, and grain size of the snow. New snow has a larger grain size and so bonds more easily. AAD staff has learnt a great deal about the process of pavement rolling from ongoing US technical support, whose expertise was gained at the Pegasus runway at McMurdo. However, the trial at Wilkins runway was in a location at which the variables were largely unknown.

As it is essential to compact every square centimetre of the runway surface to ensure bonding and a smooth level surface, each section of the trial area had to be passed over with special rollers seven times with varying weights, speed and tyre pressures. Each rolling process comprised 20 passes with the machine, with a consolidation period of 24 hours between each complete roll.

This would be a time consuming and painstaking process at the best of times, but in Antarctic conditions of high winds, below freezing temperatures and often poor visibility and whiteout, it was an outstanding feat!

The new runway construction machinery which was recently shipped from Hobart has now arrived at Casey on the *Vasily Golovnin*, and will soon be in operation at the runway site. The range of new machinery, in particular the new rollers, will reduce the number of passes from 20 to just five, and so will greatly expedite the process.

As Runway Construction Supervisor Matt F commented, *'It is as if we now have a well stocked toolbox, whereas before we were working with just a hammer!'*

Now that the variables of the conditions and situation are better understood, and with the outstanding success of the trial snow pavement process behind them, AAD staff will now work to validate the site location by the end of the season. They will use the newly arrived machinery to clear the snow off the main runway site and conduct a proof roll along the 4 000 metres. If all goes well, work will continue on the main runway next season, with a possible trial flight scheduled for early December 2006.



Runway Construction supervisor, Matt Filipowski talks to Casey Station Leader Mary Lyn Boydell(L)

**Annie Rushton
AAD Operations Branch**



Above: C-130 proof Snow Rollers on new airstrip [Photo: Annie Rushton, AAD]

**Below: SS "Southern Cross" leaving for Antarctic regions. [Photo: Beattie] Toned print under glass.
Expedition Leader, Carsten E Borchgrevink, 1898. Presented by Mrs C Kasprzak, 1982.
Collection: Tasmanian Museum and Art Gallery**



ISLANDS TO ICE – NEW ANTARCTIC EXHIBITION

An exhibition re-enforcing and expanding the unique relationship Tasmania has with Antarctica and the Southern Ocean has just opened at the Tasmanian Museum and Art Gallery. *Islands to Ice: the Great Southern Ocean and Antarctica* explores the definitions, perceptions, mythology and attractions of the far south.

Through different combinations of artefacts, objects, text, photographs and maps, the exhibition brings this wild region to life. It is designed to educate and inform visitors about an environment unlike any other known to man and take visitors on a journey from early mythology to the present day.

“*Islands to Ice* brings science and the humanities together in one exhibition,” said Senior Curator of Antarctica and the Southern Ocean, Doctor David Pemberton. “It has five main elements: Earliest Perceptions, The Southern Ocean, The Sub-Antarctic Islands, Antarctica and Humans in the Antarctic region. For instance, the Southern Ocean remains one of the least understood areas on the planet and this exhibition has several aids to help explain its sheer size and depth. So, visitors can see a model of the Southern Ocean currents and updated weather web cams of the South Pole, Davis Base and Macquarie Island.”



The exhibition is being developed as part of the nation’s most extensive collection of objects relating to Antarctica and the Southern Ocean and a number of significant artefacts have been donated to the exhibition. A major attraction is the donation of a flag made by the first Australian to reach the South Pole and donated to the TMAG.

“Dr Jon Stephenson was an expeditioner who joined the Commonwealth Trans Antarctic Expedition of 1957-8 as a dog-sled driver,” Dr Pemberton said. “He was the only Australian in an expedition that crossed the Antarctic continent from the Weddell Sea to the Ross Sea over the South Pole”

At the eleventh hour, Stephenson realised the team did not have an Australian flag so he grabbed a bit of bed sheet and some house paint, and made his own. He then flew his hand-made flag on his sled to the Pole and became the first dog sled to reach the Pole since Roald Amundsen in 1911.

Islands to Ice: the great Southern Ocean and Antarctica was officially opened at the Tasmanian Museum and Art Gallery on the 7th of March 2006. This date is the 94th anniversary of Amundsen’s announcement to the world of his successful expedition to reach the South Pole. And he sent the telegram from the GPO in Hobart”

Above: TMAG Senior Curator Antarctic and the Southern Ocean David Pemberton with a harpoon twisted by the beating heart of a speared whale.
[Photo: Peter West, TMAG]

Right: TMAG Assistant History Curator Niccole Warren with the handmade Australian flag
[Photo: Peter West, TMAG]

FACT BOX:

Island to Ice: the Great Southern Ocean and Antarctica

A new permanent exhibition at the Tasmanian Museum and Art Gallery

Tasmanian Museum and Art Gallery
40 Macquarie Street
Hobart, Tasmania

Admission is free

For more information, check out
www.tmag.tas.gov.au

The exhibition also covers all 26-island groups in the Sub-Antarctic region and provides plant specimens and geological samples from the two principle islands in Australia’s jurisdiction, Macquarie and Heard.

Life in the Antarctic is also detailed; from ice core samples to scientific equipment including remote sensing equipment like the Argo float.

Hard to miss once you are inside the exhibition is a large diorama of animals found in the region. This taxidermied display shows the true size of a soaring albatross, a Pacific sleeper shark and Patagonian Toothfish.



AN ICE TOURIST'S VIEWPOINT

'Just a healthy love of the ice continent' is the reason Sue Halliwell recently booked a passage to Antarctica aboard Aurora Expedition's Marina Svetaeva. Sue, who is an intensive care nurse at Dandenong Hospital, promised herself a trip to Antarctica to celebrate her 50th birthday, and she has kindly allowed Ice Breaker to include extracts of her letters, and photos, in the following article.
(Right: Sue Halliwell aboard 'Marina Svetaeva')



SHIP'S TOUR

"Our Itinerary went like this...completely at the mercy of the ice and weather:

- Jan 4th Departed Bluff NZ
- 5th Cruised past Snares Island
- 6th Zodiac to Auckland Island (Hardwick, Ranui Bay, Kekenno Bay, Endeby Is.)
- 7th Ship Cruise to Perseverance Harbor- Campbell Island
Force 11 storms crossing the Southern Ocean (and I didn't get sea sick!)
- 13th Ship cruised past Possession Islands (pm)
- 14th Zodiac and Helicopter tour of Coulman Island- Mowbry Bay (see Front Cover)
- 15th Ross Island Ice Pack- near Beaufort Island
- 16th Heli landing of only 10 passengers to Cape Royds (weather changed)
Zodiac to walk on the sea ice to a large trapped iceberg.
- 17th Ship cruise of Ross Ice Shelf and a pod of Orcas whales greeted us 2am
Zodiac to Inexpressible Island and Hells Gate 10 pm to 1 am. We landed on the next bay and climbed the moraine to be blessed with a view of the glacier and the Trans Antarctic Mountain Range, and to hear the pounding of the waves against the glacier. So when it was time to go back to the landing spot for a zodiac cruise, I asked if we could go to the next bay and see the glacier (and didn't we get spoilt!)
- 18th Heli to Tourmaline Plateau from 6am. I showed Conner Denton (Andrew Denton and Jennifer Burns' son - now I'm not name dropping on purpose.) how to do it and we two had some good slides and tumbles!
Zodiac to visit Mario Zucchelli Station at Terra Nova Bay at 1.30 pm
- 19th Cape Hallett ship cruise only 10 pm 19th - 3.30 am 20th:
Cape Hallett- Uruguayan fisherman medical evacuation
- 21st Ship cruise past Sturges Island, Balleny Islands
- 24th Zodiac to Sandy Bay Macquarie Island 8 pm
- 25th Zodiac to Buckles Bay Macquarie Island 6 am
- 28th Arrive in Hobart about 2.15 pm."

ICE BREAKER MAGAZINE

"I took the latest edition of Ice Breaker on the voyage with me on the Marina Svetaeva. Doug Pocock, a fellow passenger, had had a few summers at Macca (Macquarie Island) years ago as a weather spotter with the Bureau of Meteorology, didn't realize that the air service had commenced, so I was proud to show him how advanced it is. Needless to say I didn't see the magazine back for a few weeks while it did the rounds of the other interested passengers. Reading the 'Shipping and Air calendar' is a section I usually turn to first to catch up with how many visits occur over the different seasons to the different bases. Ah, how I wish I had chosen to be a doctor or biologist, meteorologist instead..."



Ross Ice Shelf with Mt Terror in the background.

MACQUARIE ISLAND

"I went on this trip to stand where Mawson stood, on top of Wireless Hill on Macquarie Island, but it is a no go zone for tourists, so I am now content to have just been able to land twice on Macca. The scientists and staff at Macca were the best, feeding us on yummy scones with jam and cream and treating us to guided tours of the base and surrounding beaches."

Continued>

AN ICE TOURIST'S VIEWPOINT

ARRIVAL IN HOBART

“ The 28th was a rushed day after so many quiet days at sea (well, rough but not a lot to do except go to lectures and eat). We were to be in Hobart by 7 a.m. but with the rough seas we were late. The Princess berthed first and customs were attending to their duties with her first. When we pulled in to dock it was around 2.15 p.m. As I was on the first flight to leave Hobart we were instructed to have our exit/entry visa and passports ready for customs - and our luggage was being checked by their trusty beagles. Then it was on the bus and off to the airport. A few of the passengers and staff had planned on a stay in Tassie and to do some of the walks. There are so many beaut things to do and see in Tasmania, I've been over twice and each time taken a different route but always return home thinking about what I'd like to see/do next.”



Top Left: Sliding on the Tourmaline Plateau

Top Right: Hell's Gate

Above Left: Penguins' view of *Marina Svetaeva*

Above Right: 'Googie' on Nugget's Point

[All Photos courtesy Sue Halliwell]

AURORA EXPEDITIONS

“I had a wonderful adventure and cannot recommend Aurora Expeditions highly enough. The staff worked so hard to keep everyone busy and informed (with lectures x 3 a day) as well as entertained to the max by Andrew Denton and Jennifer Burn - I couldn't have asked for more.”

AURORA EXPEDITIONS' NEXT VOYAGE

ICEBERGS AND EMPERORS

Imagine coming face to face with Emperor Penguins and Elephant Seals, taking adrenaline charged helicopter rides over the polar plateau or cruising beneath massive ice cliffs and icebergs hundreds of metres tall.

Aurora Expeditions invites you to visit one of the most remote places on Earth – a sparkling wonderland full of exotic wildlife, spectacular scenery and unforgettable adventures. Having just returned from a highly successful expedition to East Antarctica, Aurora has announced a new voyage to Commonwealth Bay and beyond departing December 2006 on board their new ship *Marina Svetaeva*.

Svetaeva's maiden voyage departed Hobart in December and returned on 2nd January. The 25- day trip was filled with wondrous experiences. From the rare privilege of walking inside Mawson's Hut, to close encounters with Killer Whales and eight species of penguins, the expedition was jam-packed with unique adventures - often in places where man had never before set foot.

With over 98% of tourists visiting Antarctica from Argentina, departures from Hobart have the added bonus of visiting the most remote and pristine part of the Antarctic continent.

The 25-day '**Icebergs & Emperor's**' expedition departs Hobart 11th December, finishing in Bluff, New Zealand 4th January. Prices start from US\$10,900 per person.



Contact Aurora Expeditions on 1800 637 688 (toll-free), email auroraex@auroraexpeditions.com.au or visit www.auroraexpeditions.com.au.

For more details contact David Mannix, Marketing & PR Manager, Aurora Expeditions
Ph: (02) 9252 1033 Email: david@auroraexpeditions.com.au

Aurora Expeditions is an Australian adventure company specialising in small group expedition-style travel to polar regions and other wild and remote places. A world leader in polar cruising, Aurora offers their travellers the chance to have an intimate experience in these regions with their flexible, innovative itineraries. On some voyages, mountain climbing, sea kayaking, photography and scuba diving options are available and Aurora's expert naturalists, historians, staff and crew help to unlock the wonders of these special places. Deeply committed to education and preservation of the environment, Aurora's owners, Greg Mortimer and Margaret Werner are veterans of almost three decades of Antarctic research, private Antarctic mountaineering expeditions and polar travel. For more information visit www.auroraexpeditions.com.au

THERE WAS NO COLD WAR IN ANTARCTICA

Contribution of Dr Phillip Law to Australia's Antarctic Endeavours, by Irina Gan

Irina enrolled in a Masters Program at the Institute of Antarctic and Southern Ocean Studies (IASOS) at the University of Tasmania, and this was the winning essay of the Dr Phillip Law Essay Competition in 2005.

The 1950s were a difficult and tense time in World history: although the Second World War had come to an end, an "Iron Curtain" had come down between the Communist bloc and the West. The Cold War with its nuclear and space race was in full swing, diplomatic relations between Australia and the USSR were non-existent from 1954-1959 due largely to the infamous "Petrov affair" and mutual suspicion was at its peak. It was during this time, in 1952, that The International Council of Scientific Unions set up a committee to organize what later became the International Geophysical Year, where twelve nations, including Australia and the USSR, agreed to conduct scientific programmes in the Antarctic for 18 months from 1 July 1957.

How and why could it happen that in such an unstable political climate the relationship between these two countries in the cold Antarctic environment was able to develop and flourish?

As head of the Australian Antarctic Division of the Department of External Affairs, Phillip Garth Law was the human face of the Australian Antarctic Programme. He was eager for Australia to involve itself in Antarctic research, and had a vision of all the countries of the world combining in a "scientific assault...aided by the technological resources of modern society" to finally tear down the "icy curtain" which had until now prevented scientific knowledge being gained from Antarctica.¹

It was this vision that was instrumental in achieving productive relations with the other nations involved in the IGY, the most daunting of which was the USSR.



Vasily Golovnin at Casey Station

Australia opened its first base on the Antarctic continent on 13 February 1954. A little over a year later, the Hon. Richard G. Casey, the Minister for External Affairs who was responsible for Australia's Antarctic programme, "spoke to Cabinet about the Soviet intention to establish a scientific research station...in the centre of our Australian Antarctic Territory. It was agreed that [he] should make a public statement welcoming the...Russians to make observations. As we can't stop them, we'd better take it with good grace".²

In January 1956, the leader of the first Soviet Antarctic continental expedition of 1955-1957, Mikhail Mikhailovich Somov³ sent Law a radiogram suggesting the exchange of meteorological data between Mawson station and the Soviet Mirny station, the construction of which began on 19 January. John Bechervaise, who was Officer in Charge at Mawson recalled in his diaries: "Wednesday 25 January 1956. At lunchtime arrived a message...from the Russian base at Haswell Island...I wrote a suitable reciprocating signal. Other signals followed throughout the day, until arrangements for the exchange of 'weather' was complete".⁴

Law, who was on his way to Mawson on the *Kista Dan* sent his regards and expressed his intention to visit the proposed site of the Soviet base in the next few days, weather and ice permitting. He wrote that they could discuss the exchange of meteorological data and the condition of the ice edge to the West of the Shackleton Ice Shelf.

Somov replied: "I will be most happy to see you on board our vessel near the Haswell Island at any time convenient for you".⁵ Ivan Cherevichnii, the Russian squadron commander and navigator Dmitri Morozov set out in their Li-2 airplane to check the ice and suggest a route for the *Krista Dan*. Early in the morning of 30 January 1956, Law and other members of the Australian Antarctic Expedition came aboard the Russian *Ob* and visited the site of the future Soviet station. "We were not sure how the Russians would react, and they were not sure how we would react, so there was some inhibition on both sides", Law recalled.⁶

The visit was surprisingly warm, friendly and successful: future plans for cooperation during the winter season were discussed. Since the Australians were their close neighbors in Antarctica and had already spent the winter at Mawson, the Soviets asked for their suggestions. Somov recollected that Law gave them "helpful, practical advice on the weather conditions...on equipment for everyday use in living and working quarters, on the use of various forms of transport and so on. Mr. Law...is a very thoughtful, observant, straightforward cordial man. This impression was strengthened at each new encounter with him..."⁷

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It seems that this advice was much appreciated and remembered even eight years after Mirny station was officially opened on 13 February 1956, exactly two years after Mawson. As Law notes in his report after visiting the USSR in 1964: the “statements made by Russian speakers at the Ambassador’s dinner and at gatherings at the Institute [Arctic and Antarctic Research Institute in Leningrad] showed that the Soviet expedition leaders were grateful for Australian assistance in the past. They mentioned the advice I gave them when they first landed at Mirny, the assistance provided at Mawson to Russian aircraft, and approval from Australia for Soviet aircraft to use airfield facilities en route to Antarctica.”⁸



Australians and Russians at Casey, Jan 2006

Contacts with Soviet scientists were not limited to the Antarctic. They continued in Australia as well as the Soviet Union. When the *Ob* was in Adelaide in April 1956 the expeditioners were invited to the University where they received presents, books, and geological and botanical samples. On 24 April Law delivered a lecture on the ANARE expedition at the University’s Mawson Building, which was attended by many of the Russians. At the start of his lecture, Law welcomed them and noted that this meeting was “historically important...[The Russians undertook a difficult task] in Antarctica and that he “had never seen that in such a short period of time oceanographic observations were completed at 90 oceanographic sites”.⁹

Although professional and personal contacts with the Soviet scientists were developing constructively, the Australian government was still worried that the scientific observations which were being undertaken could be used for military purposes. Casey asked Law to report on what he saw at Mirny to which the latter replied that “the Russian station at Mirny is now firmly established. It is larger and more elaborate than any station in Antarctica...The scientific programme of the USSR in Antarctica is most comprehensive. It has been thoroughly planned...The expedition appears to be civilian and non-military. The most elaborate study being undertaken during the IGY is oceanography. Their oceanographic programme appears to be far ahead of that of any other nation. The Russians went out of their way, both at Mirny and at Adelaide, to be friendly and cooperative. They discussed their plans frankly and openly and welcomed inspection of their station and their ship...”¹⁰

The groundwork for Australian-Soviet cooperation and mutual assistance in Antarctica, laid by Law in 1956 continued through the next year, although Law himself did not meet with any Russian scientists during 1957.

A radiogram however was sent from Mirny to Mawson on the occasion of Australia Day and Mid-Winter greetings were exchanged. The ANARE expeditioners, led by Keith B. Mather, were warmly welcomed at Mirny in September 1957 and visited for 6 days.

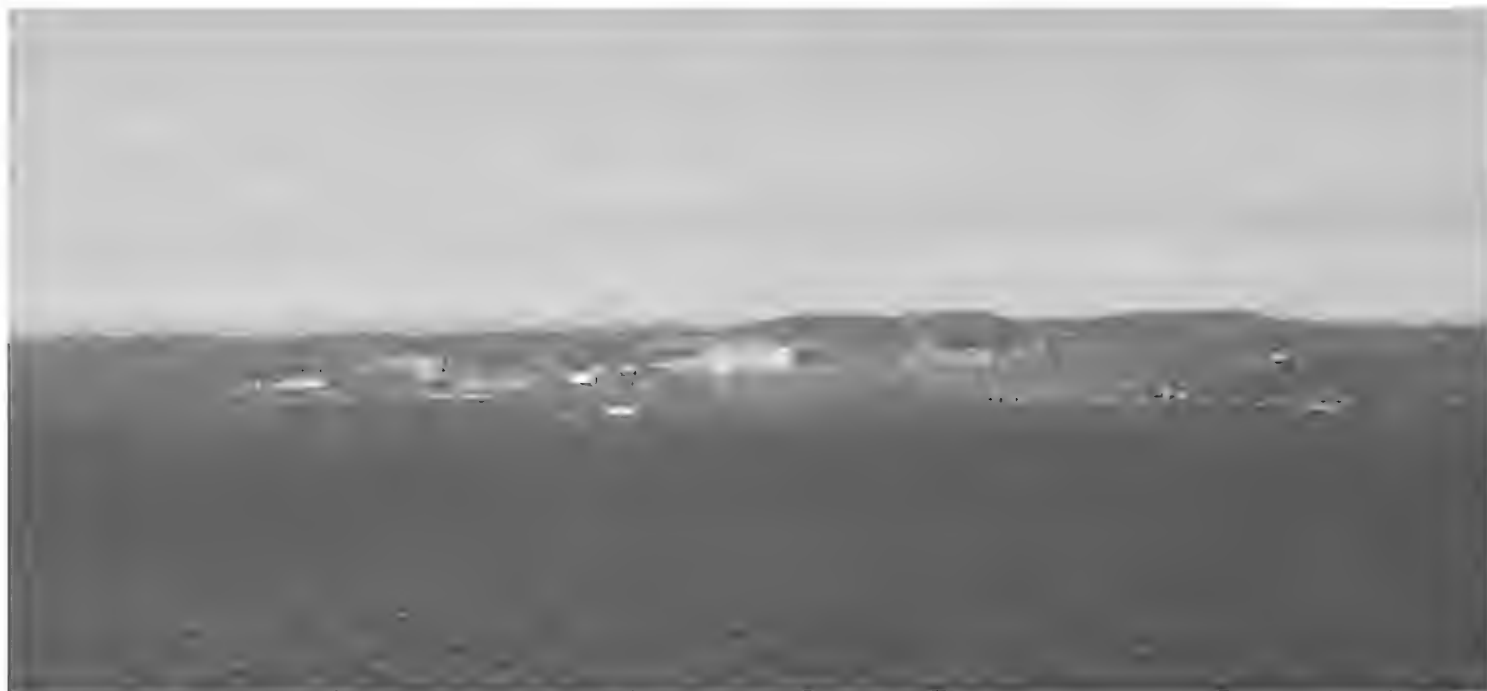
The next meeting occurred on 1 February 1958 when the *Thala Dan* carrying the Australian expeditioners, with Law as voyage leader, visited Mirny station en route to Mawson and Davis stations. They spent one or two days with the Russians, getting acquainted with the Soviet scientific programme, examining the all-terrain “Penguin” vehicles, airplanes and the radio station. The Australians were impressed by the efficiency and hospitality evident at Mirny. Law said that “the Australian scientists are happy for the Russians who achieved such success wintering in Antarctica. The Mirny’s warm welcome, hospitality and interesting scientific information will develop further close cooperation between the Australian and the Soviet scientists”.¹¹

These sentiments are echoed by the famous Soviet journalist Yuhon Smuul who traveled to Antarctica with the *Cooperatzia* in 1957-1958. In his “The Ice Book – An Antarctic Diary” he recalls *Thala Dan*’s visit and the fact that both Law and Treshnikov spoke about the necessity of close contacts between the scientists of Australia and the USSR. He found that Law “has a close affinity with the Soviet scientists due to the commonality of their scientific interests”.¹²

This commonality of purpose and interest was the foundation on which the Australian – Soviet contacts in the Antarctic were built. Law’s vision was being realized: the desire to acquire knowledge and human interactions in overcoming quite significant obstacles seems to have prevailed over Cold War ideology. The combined assault on the “Ice Curtain” was successful in raising the “Iron Curtain”, at least in Antarctica. This gave credence to the common perception that here there was no Cold War, which is in no small part due to the first Director of the Australian Antarctic Division, Dr. Phillip Law.

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Davis Base

References

- Bardin, I. (Ed.) (1958) *Opisanie expeditzii na dizel electrohode Ob 1955-1956 (Description of the expedition on the Ob)*, Izdatelstvo Akademii Nauk (Academy of Sciences Press), Moscow. (In Russian, quotes translated by Irina Gan).
- Bechervaise, J. (1955-1956) *Diaries*. (Typewritten). Special Collection, AAD Library, Kingston, Tasmania.
- Law, P. (1956) *Report on visit to USSR base at Mirny*. (Typewritten). AAD Library, Kingston, Tasmania.
- Law, P. (1964) *Report on visit to USSR*. (Typewritten). AAD Library, Kingston, Tasmania.
- Ralston, K. (1998) *Phillip Law. The Antarctic Exploration years, 1954-66*, AusInfo, Department of Finance and Administration, Canberra.
- Smuul, Y. (1977) *Ledovaya kniga - Antarkticheskii Dnevnik (The Ice Book - An Antarctic Diary)*, Eesti raamat, Tallin. (In Russian, quotes translated by Irina Gan).
- Somov (1966) In *Vestnik of the Academy of Sciences*, pp. 73-81. (Typewritten translation). AAD Library, Kingston, Tasmania.
- Somov, M. (Ed.) (1959) *Pervaya Kontinentalnaya Expeditzia 1955-1957 (The First Continental Expedition)*, Morskoi Transport, Leningrad. (In Russian, quotes translated by Irina Gan).
- Treshnikov, A. F. (1958) *Mezhdunarodnie svyazi Vtoroi Kontinentelnoi Antarkticheskoi Expeditzii (International Contacts of the Second Continental Antarctic Expedition) Informatzionni buleten Sovetskoi Antarkticheskoi expeditzii (Information Bulletin of the Soviet Antarctic Expedition)*, No 1, 83-87. (In Russian, quotes translated by Irina Gan).

¹ Ralston, p 24.

² Ralston, p 62

³ Mikhail Somov (1908-1973)—scientist and polar explorer; well-known oceanographer; leader of the Arctic Drifting Scientific Station “North Pole-2” in 1950-1951; Doctor of Geographical Sciences (1954); Deputy Director of the Arctic and Antarctic Research Institute in Leningrad in 1951-1964. He was awarded a gold medal from the British Royal Society and a gold medal from the Swedish Royal Society of Geography and Anthropology.

⁴ Bechervaise, pp 543-544

⁵ Bardin, p 214

⁶ Ralston, p 70

⁷ Somov, 1966, p 5

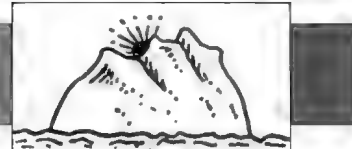
⁸ Law, 1964, p.18

⁹ Bardin, p 224

¹⁰ Law, 1956, p.9

¹¹ Treshnikov, 1958, p.85

¹² Smuul, 3 February 1958.



CONGRATULATIONS TO:

TPN's Chairman, **Bill Lawson** (SKM) who was made a Member of the General Division of the Order of Australia (AM) in this year's Australia Day awards. Bill has been responsible for a range of major infrastructure projects in engineering in Tasmania and Antarctica, as well as being the founding director and chairman of the Beacon Foundation, which focuses on job creation for unemployed youth both in Tasmanian and mainland Australia.

ARCTIC SUCCESS

An international team has validated the plausibility of explorer Robert Peary's claim he had reached the North Pole in 39 days by dog team in 1909. Last year's team of 5 made the Pole in just over 36 days, using Canadian Inuit dogs in a fan hitch, pulling lightweight Peary replica sleds.

MORE EFFICIENCY

The Australian Fish Names Committee met in Hobart in October last year to work on a standardised list of fish names. See www.fishnames.com.au.

LIGHTS AWAY

The Magnetic North Pole is currently moving rapidly from Arctic Canada to Siberia, which means the aurora borealis will become more visible over Europe and Russia, rather than over Alaska. Scientists are unsure at this stage whether this shift will be permanent, or part of a normal oscillation between the two areas.

NEW BIRD BASE

Australia's branch of the Ocean Biogeographic Information System (OBIS) has been established in Hobart, administered by the CSIRO and National Oceans Office (NOO). OBIS is an online database allowing scientists access to information on bird species and distribution, all over the world.

QUEENS' BATON GOES DEEP SOUTH

The Commonwealth Games' Queen's Baton was shipped to Antarctica aboard *Aurora Australis* this summer, as part of the 180.000 km year-long relay leading up to this month's Opening of the Games in Melbourne. The Governor-General, Major Michael Jeffrey, passed the Baton to Sharon Stacey aboard the ship on December 2, 2005.

SINGING ICEBERG

Sounds from B-09A resemble a swarm of bees and are made by water rushing through the iceberg's crevasses and tunnels at high pressure.

COMNAP TRADE SHOW INVITATION

July 2006 will see the hosting of the major biennial international conference on Antarctic Science and Operations in Hobart, Australia. Already it is attracting delegates from across the globe, many of whom are integrally involved with the procurement of goods and services that underwrite the success of every nation's Antarctic Program.

Commencing on Saturday 8th and running through to Wednesday 19th July, the conference will welcome and encourage delegates from all countries involved in Antarctic operations and science to interact, collaborate and enjoy the varied session and social program on offer. The conference includes an extensive and focused trade exhibition (12th – 15th July 2006), the location of which will be the hub of social contact throughout the program – tremendous opportunities therefore exist for your business to intermingle directly with potential clients, to showcase existing involvement in Antarctica or to open new doors for your company's involvement in support of the valuable research work conducted in this very special place.

I invite you to establish a presence at our Conference Trades Exhibition venue to ensure promotion of your business within the international community responsible for making resourcing decisions. Please consider visiting the website and downloading the prospectus with a view to accepting one of the sponsorship and/or exhibitor packages. The Local Organising Committee is very happy to consider any variations on these proposals that might better match your company's needs more closely – after all, flexibility and innovation are the basis of any successful Antarctic operation.

The website address is <http://www.scarcomnap2006.org/sponsors.php>. Just click on "Download Sponsor-ship Prospectus" to begin your journey into a successful advertising venture for your business. Alternatively, at the same location, register your sponsorship interest to receive a hard copy of the prospectus by mail. For further inquiries, please contact the Conference Secretariat, Account Manager, Denise Hobman, at Leishman Associates, 113 Harrington Street, Hobart TAS 7000. She can be contacted by phone on +61 (3) 62347844 or email deniseh@leishman-associates.com.au.

Thank you for your interest and I look forward to meeting you at the Conference, during what promises to be an exciting and rewarding time.

[from Dr Tony Press, Director, Australian Antarctic Division]



BOOKS

THE MAGIC OF ANTARCTIC COLOURS, DAVID ABBEY PAIGE (1901-1978) ARTIST OF THE BYRD ANTARCTIC EXPEDITION 1933-1935 by Reinhard A Krause and Lars U. Scholl. Published by the German Maritime Museum and Alfred Wegener Institute, Bremerhaven, Germany. Price: 22 Euros.

- Contains sketches, pastels, paintings, photographs and other illustrations produced by Paige, who was the official artist on the Byrd expeditions.

VODKA ON ICE; A YEAR WITH THE RUSSIANS IN ANTARCTICA by Charles Swinthinbank. Published by the Book Guild Ltd, UK. Price: £22.

- This is the fourth autobiographical title, and is an account of the author's residence at several Antarctic bases during 1963-65.

THE LAST EXPLORER by Simon Nasht. Published by Hodder. Price: \$35.

- Describes Sir Hubert Wilkins' career and exploration of both North and South Poles.

ICE ISLAND: EXPEDITION TO ANTARCTICA'S LARGEST ICEBERG by Gregory S. Stone. Photos by Wes Skiles. Published by Bunker Hill Publishing Inc. Price: @29.95

- This book records the journey led by Stone and Skiles to investigate the 4,500 square mile iceberg which broke free from the Ross Ice Shelf in 2000.

COLD – A RECORD OF AN ANTARCTIC SLEDGE JOURNEY by Laurence M. Gould. Published by Carleton College. Price: \$59.99.

- Dr Gould served as geologist and second-in-command of the first Byrd Antarctic expedition in 1928-30. In 1929 he set out with 5 other expeditioners, from Little America, base headquarters beside the Bay of Whales in the Ross Sea, on a 1,500-mile dog-sled trek to the Queen Maud Mountains. (See postcard below)





ELEVEN ICY DAYS

Two pilots and an air support worker stranded on the Amery Ice Shelf, because of damage to the hydraulics in their CASA 212's skis, were airlifted to Beaver Lake and then on to Davis Station on January 6 this year. Rescue helicopters arrived on the 13th, after bad weather delayed earlier attempts, and mechanics were able to repair the plane for its return flight. The trio remained in constant contact with AAD, were well supplied with food and sheltered in the plane and tents.

BIRD WALK

Scientists plan to study how waddling penguins walk without falling over. By understanding the mechanics of penguin walking on short legs, improvements could be made to the development of walking robots, as well as helping elderly people adjust their walking pattern to prevent falls.

NARWHAL KNOWLEDGE

US researchers have discovered that the 2.4 m long tusk of the rare Arctic whale, the narwhal, works as a hydrodynamic sensor to help it test water qualities such as temperature, pressure and salinity. The tusk is like a sensitive membrane, covered with 10 million nerve connections.

SOUTHERN OCEAN YACHTS

Before returning to Sydney to complete their circumnavigation the world in *Berrimilla II*, Sydney yachtsmen Alex Whitworth and Peter Crozier called in to Hobart in December last year. After completing the Sydney-Hobart yacht Race in January, they sailed via Cape Horn, England, Cape of Good Hope and the Southern Ocean. See www.berrimilla.com.

In January this year, a father and two of his sons left Kettering, Tasmania aboard the 10.3m long *Snow Petrel* to sail to Commonwealth Bay in Antarctica. John, Ben and Matthew Tucker took a fortnight to reach Antarctica, where they contacted scientists at the French base, Dumont D'Urville and received reports on ice conditions from *Aurora Australis*.

NEW TEACHING MODULE

A new Essential Learnings module has been developed in Tasmania to help students learn about global warming and climate change. The scientific consultant for the unit was Jaci Brown, a CSIRO climatologist, and the unit has been taught to a group of Grade 7 students at Ogilvie High School in Hobart. Additional information can now be sourced from the new Antarctic exhibition at TMAG.

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3	March	2006	TPN meeting. 11.00am-1.00pm. Clarence City Council Chambers, Tasmania .
5-12	March	2006	Sea Week.
7	March	2006	Official opening of 'Islands to Ice, the Great Southern Ocean and Antarctic Exhibition' Tasmanian Museum and Art Gallery. Hobart, Tasmania . Hotline: 03 6211 4166 or antarctic.exhibition@tmag.tas.gov.au
22	March	2006	TPN Procurement Conference. 10am-12 noon. CCAMLR Headquarters, 181 Macquarie St, Hobart, Tasmania .
31	March	2006	End of exhibition of the Antarctic Photography of Herbert Ponting. Scott Polar Research Centre (SPRI), Cambridge, U.K.
24-30	April	2006	IAATO meeting. Washington, DC, USA.
29	April	2006	Friends of SPRI Diamond Jubilee Birthday Tea. SPRI, Cambridge, UK.
21-25	May	2006	Contaminants in Frozen Ground conference. Oslo, Norway. See www.geologi.no/cfg5 .
5	June	2006	World Environment Day.
9	June	2006	TPN meeting. (to be confirmed).
14-23	June	2006	GEBCO – General Bathymetric Chart of the Oceans Conference, Germany.
16-25	June	2006	Midwinter Festival events. Hobart, Tasmania . See www.antarctic-tasmania.info

MIDWINTER DINNERS 2006

17	June	Hobart, Tasmania. Details at www.antarctic-tasmania.info
17	June	South Australia
21/22	June	ANARE stations, Antarctica
23	June	Victoria
24	June	ANARE Club, Tasmania. Details at asanareclub@netspace.net.au
1	July	Sydney, NSW

For other states, territories and details, see www.anareclub.org.au/allmwd.htm

6-7	July	2006	International Forum on the Sub-Antarctic. Hobart, Tasmania . Contact antarctic@development.tas.gov.au
9-19	July	2006	SCAR XXIX/COMNAP XVIII Meetings, including Trade Show. Hobart, Tasmania .



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SHIPPING & AIR CALENDAR



1-3	March	2006	VASILY GOLOVNIN	V4	Arrives Hobart.
2-3	March	2006	AURORA AUSTRALIS	V3	Davis Base.
11	March	2006	SPIRIT OF ENDERBY	V4.6	Arrives Bluff, NZ.
14-17	March	2006	AURORA AUSTRALIS	V3	Arrives Hobart, departs for Macquarie Island.
26-29	March	2006	AURORA AUSTRALIS	V5	Casey Base.
4-10	April	2006	AURORA AUSTRALIS	V5	Macquarie Island.
13-14	April	2006	AURORA AUSTRALIS	V5	Arrives Hobart.

NO FURTHER FLIGHTS THIS SEASON

2006-2007 SEASON

17-18	October	2006	AURORA AUSTRALIS	V1	Arrives Hobart, departs for Casey Station.
28	October	2006-	AURORA AUSTRALIS	V1	Casey Station.
2	November	2006			
9-15	November	2006	AURORA AUSTRALIS	V1	Marine science.
16	November	2006	AURORA AUSTRALIS	V1	Arrives Hobart.

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Top: USA's new South Pole Station, Antarctica. Above: China's Great Wall Station, Antarctica

